

Appl. No. 10/765,808

Attorney Docket No.: N1085-00256 [TSMC2003-0899]

Amdt. dated 05/18/2006

Response to Office Action of 02/24/2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1 1. (Currently Amended) A plasma etching apparatus comprising a chuck for
2 retaining a substrate and hardware that is formed of a material that includes oxygen
3 impregnated therein such that said oxygen is released when an etching operation is
4 carried out.
- 1 2. (Original) The plasma etching apparatus as in claim 1, wherein said chuck is
2 substantially circular and said hardware comprises a focus ring that peripherally
3 surrounds said chuck.
- 1 3. (Original) The plasma etching apparatus as in claim 1, wherein said chuck is
2 substantially circular and said hardware comprises a focus ring that is annular in shape
3 and at least a portion of said focus ring substantially continuously extends below a
4 peripheral portion of said chuck.
- 1 4. (Original) The plasma etching apparatus as in claim 1, wherein said chuck
2 comprises an electrostatic chuck.
- 1 5. (Original) The plasma etching apparatus as in claim 1, wherein said hardware
2 comprises a focus ring composed primarily of quartz.
- 1 6. (Original) The plasma etching apparatus as in claim 1, wherein said hardware
2 comprises a focus ring formed of a ceramic.
- 1 7. (Original) The plasma etching apparatus as in claim 2, further comprising a
2 further focus ring, said focus ring and said further focus ring forming a focus ring set that
3 peripherally surrounds said chuck.

Appl. No. 10/765,808 Attorney Docket No.: N1085-00256 [TSMC2003-0899]
Amdt. dated 05/18/2006
Response to Office Action of 02/24/2006

1 8. (Currently Amended) A plasma etching apparatus comprising a chuck for
2 retaining a substrate and a focus ring, at least one of said chuck and said focus ring
3 formed of a material that includes including oxygen therein such that said oxygen is
4 released when an etching operation is carried out.

5 9. (Currently Amended) [[A]] The plasma etching apparatus as in claim 1, wherein
6 said hardware comprises a focus ring and further comprising an etch chamber including
7 therein a focus ring and a chuck for retaining a substrate, said focus ring maintainable
8 at a temperature no greater than a temperature of said substrate while an etching
9 operation is carried out upon said substrate.

1 10. (Original) The plasma etching apparatus as in claim 9, wherein said chuck
2 comprises an electrostatic chuck and said substrate comprises a semiconductor
3 substrate.

1 11. (Original) The plasma etching apparatus as in claim 9, wherein said focus ring
2 maintains contact with said electrostatic chuck and said electrostatic chuck is cooled
3 during said etching operation.

1 12. (Original) The plasma etching apparatus as in claim 11, wherein said focus ring
2 is disposed peripherally around said substrate and includes a portion that rests on an
3 annular landing section of electrostatic chuck.

1 13-28. (Cancelled)

1 29. (New) A plasma etching apparatus comprising a chuck for retaining a substrate
2 and a focus ring peripherally surrounding said chuck and formed of a focus ring material
3 that includes oxygen throughout the focus ring material, such that said oxygen is
4 released when an etching operation is carried out.

Appl. No. 10/765,808 Attorney Docket No.: N1085-00256 [TSMC2003-0899]
Amdt. dated 05/18/2006
Response to Office Action of 02/24/2006

1 30. (New) A plasma etching apparatus comprising a chuck for retaining a substrate
2 and formed of an oxygen-impregnated material, and a focus ring peripherally
3 surrounding said chuck.

1 32. (New) The plasma etching apparatus as in claim 30, wherein said chuck
2 comprises an electrostatic chuck.

1 32. (New) The plasma etching apparatus as in claim 31, wherein said chuck is
2 disposed within an etching chamber and further comprising said etching chamber
3 containing therein further hardware formed of said oxygen-impregnated material.

1 33. (New) A plasma etching apparatus comprising a chuck for retaining a substrate
2 and a focus ring peripherally surrounding said chuck and formed of a focus ring material
3 that includes oxygen throughout the focus ring material, such that said oxygen is
4 released when an etching operation is carried out, the focus ring maintainable at a
5 temperature no greater than a temperature of said substrate while said etching
6 operation is carried out upon said substrate.